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CNC CHARLESTON

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LETTER FROM U S NAVY REQUESTING ADVANCEMENT OF 9 SUBSURFACE  
INVESTIGATION POINTS INTERIM MEASURE TETRACHLOROETHENE AREA  
CHARACTERIZATION AREA OF CONCERN 607 (AOC 607) ZONE F CNC CHARLESTON SC

5/11/2001  
CH2MHILL



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May 11, 2001

158814.ZF.PR.05

Mr. Mansour Malik  
Hydrogeologist  
South Carolina Department of Health and Environmental Control  
Bureau of Land & Waste Management  
Division of Hydrogeology  
8901 Farrow Road  
Columbia, SC 29203

Subject: Request for the Advancement of Subsurface Investigation Points  
Interim Measure PCE Source Area Characterization  
AOC 607, Zone F  
Charleston Naval Complex, North Charleston, South Carolina

Dear Mansour:

On behalf of the U.S. Navy Southern Division Naval Facilities Engineering Command, CH2M-Jones requests the advancement of 9 subsurface profiler borings with 10 contingency locations to characterize the tetrachloroethene (PCE) source area at AOC 607. Two groundwater samples will be collected from each of the profiler borings which will be advanced using direct push technology (DPT). To evaluate changes in the local lithology one membrane interface probe (MIP) point will be advanced prior to the introduction of each DPT boring. In each pair the DPT and MIP point will be separated by approximately 6 to 12 inches. In addition, 2 acetate-sleeve core samples will be collected to the existing clay unit located approximately 8.5 to 13.5 feet below land surface to characterize the local lithology and to correlate the findings with the response from the MIP soil conductivity probe.

Samples collected from the DPT profiler borings will be used to characterize the extent of PCE dense non-aqueous phase liquid (DNAPL) in the immediate area south to southwest of building 225 and in the immediate area north and south of building 1189 at AOC 607. Each of the borings will be advanced to the clay unit. Figure 2-1 presents the proposed locations of the DPT profiler borings.

The source area delineation information obtained from these activities will be used to identify the target treatment area to be addressed using the six-phase heating process and to evaluate the mass and extent of PCE DNAPL present at the site.

The completed DPT points will be filled with bentonite-grout slurry to approximately 4 inches below ground surface. The remaining 4 inches will be filled with a quick dry concrete

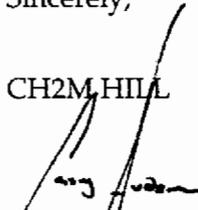
Mr. Mansour Malik  
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mix. The technical approach to the PCE source area characterization at AOC 607 is provided in the Phase II Interim Measure Work Plan.

CH2M-Jones has scheduled to complete this work the week of May 14, 2001. If you have any questions, comments or require additional information please do not hesitate to contact us.

Sincerely,

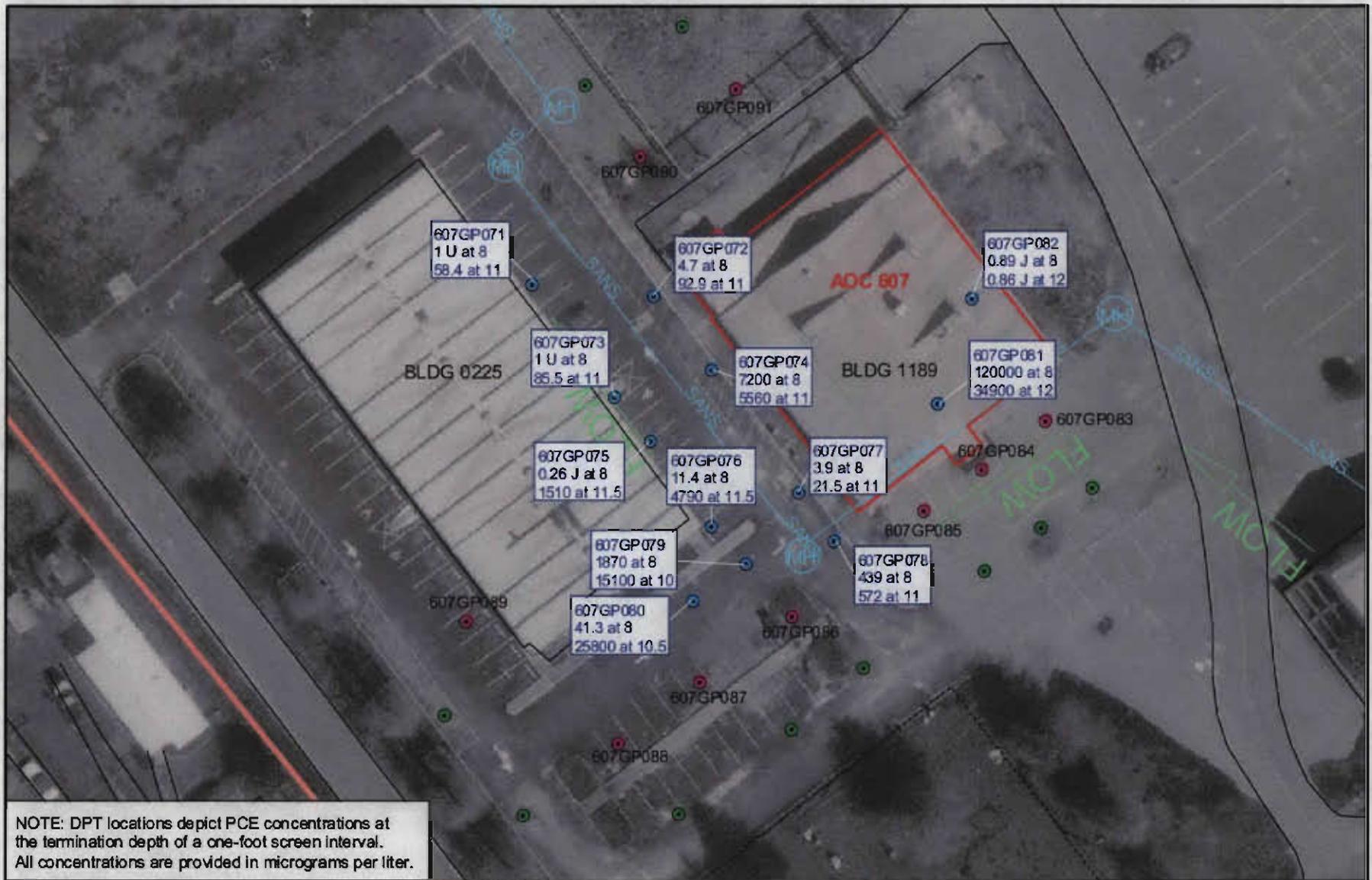
CH2M HILL



Casey E. Hudson, P.E.  
Project Engineer  
(407) 423-0030 ext. 251

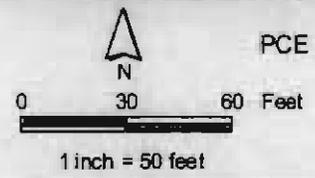
enclosure

cc: Paul Bergstrand, P.G./SCDHEC  
Tony Hunt, P.E./SOUTHDIV  
Rob Harrell/SOUTHDIV  
Dean Williamson, P.E./CH2M HILL/GNV  
Tom Beisel, P.G./CH2M HILL/ATL



NOTE: DPT locations depict PCE concentrations at the termination depth of a one-foot screen interval. All concentrations are provided in micrograms per liter.

- DPT Groundwater Sample Location
- Proposed DPT Groundwater Sample Location
- Contingency DPT Groundwater Sample Location
- Fence
- Roads - Lines
- SEWER-LINE/MANHOLE
- SEWER-FLOW-ARROW
- AOC Boundary
- SWMU Boundary
- Buildings
- Zone Boundary



**Figure 2-1**  
 PCE Analytical Results and Proposed DPT Sample Locations  
 Interim Measure Work Plan  
 Zone F - AOC 607  
 Charleston Naval Complex

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